

PLUS 4/26/04

Butler, Douglas

Fr m: PLUS
Sent: Monday, April 19, 2004 11:27 AM
T : Butler, Douglas
Subject: PLUS Results for 09974739

Here are the PLUS search results for 09974739.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.



09974739_QUAL.txt



09974739_LIST.txt



09974739_WEST.txt



09974739_EAST.txt



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09974739_CLS.txt



09974739_CLSTITLES.txt



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09974739_LIST

PLUS Search Results for S/N 09974739, Searched April 19, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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09974739_CLS
Most Frequently Occurring Classifications of Patents Returned
From A Search of 09974739 on April 19, 2004

Original Classifications

3 91/376R
3 188/266.6
3 254/270
3 376/260
2 74/606R
2 123/90.41
2 137/218
2 137/625.43
2 188/151R
2 222/401
2 303/9.75

Cross-Reference Classifications

4 60/547.1
4 137/596.17
4 188/349
4 251/129.14
3 91/376R
3 91/459
3 239/363
3 254/360
3 303/61
3 376/258
2 60/545
2 60/551
2 60/593
2 60/594
2 74/579R
2 91/44
2 92/240
2 92/33
2 166/75.15
2 188/290
2 210/237
2 222/209
2 222/325
2 239/360
2 239/373
2 251/129.08
2 251/287
2 303/10
2 303/2
2 303/9.62
2 376/313
2 417/555.2
2 475/82

Combined Classifications

6 91/376R
5 137/596.17
4 60/547.1
4 188/349
4 251/129.14
4 376/258

09974739_CLS

3 60/594
3 74/579R
3 91/459
3 123/90.41
3 137/218
3 188/266.6
3 222/401
3 239/363
3 254/270
3 254/360
3 303/61
3 303/9.62
3 376/260
3 417/555.2
2 60/487
2 60/545
2 60/548
2 60/551
2 60/562
2 60/593
2 74/606R
2 74/625
2 91/361
2 91/375A
2 91/44
2 92/187
2 92/240
2 92/33
2 123/568.24
2 137/625.43
2 137/627.5
2 166/75.15
2 180/429
2 188/151R
2 188/290
2 210/237
2 222/209
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2 222/385
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2 239/373
2 251/129.08
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2 251/30.01
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2 251/96
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2 303/119.2
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2 303/9.75
2 376/313
2 475/82

09974739_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 09974739 on April 19, 2004

- 6 91/376R (3 OR, 3 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
 FLUID CONTROL
 91/368 .Follower type
 91/374 ..Plural movable valve parts
 91/376R ...One movable part unitary with working member
- 5 137/596.17 (1 OR, 4 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/596 .Supply and exhaust
 137/596.17 ..Motor
- 4 60/547.1 (0 OR, 4 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/547.1 ..With control of or by a separate power fluid,
 etc.
- 4 188/349 (0 OR, 4 XR)
 Class 188 : BRAKES
 188/381 FRICTIONAL VIBRATION DAMPER
 188/151R .Fluid pressure
 188/152 ..Road vehicle
 188/349 ...With front rear brake apportioner
- 4 251/129.14 (0 OR, 4 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/129.01 ELECTRICALLY ACTUATED VALVE
 251/129.14 .Freely rotatable ball valve
- 4 376/258 (1 OR, 3 XR)
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES,
 SYSTEMS, AND ELEMENTS
 376/245 TESTING, SENSING, MEASURING, OR DETECTING A
 FISSION REACTOR CONDITION
 376/258 .Position detection
- 3 60/594 (1 OR, 2 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/594 ..Having cam, or lever system driving master
- 3 74/579R (1 OR, 2 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/469 CONTROL LEVER AND LINKAGE SYSTEMS
 74/579R .Pitmans and connecting rods
- 3 91/459 (0 OR, 3 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/418 WITH MOTIVE FLUID VALVE

09974739_CLSTITLES

91/459 .Electrically operated (275) (361)

3 123/90.41 (2 OR, 1 XR)

Class 123 : INTERNAL-COMBUSTION ENGINES
123/90.1 POPPET VALVE OPERATING MECHANISM
123/90.39 .Rocker
123/90.41 ..Individually fulcrumed

3 137/218 (2 OR, 1 XR)

Class 137 : FLUID HANDLING
137/215 BACK FLOW PREVENTION BY VACUUM BREAKING (E.G.,
ANTI-SIPHON DEVICES)
137/216 .Air vent in liquid flow line
137/217 ..Valved
137/218 ...With co-acting valve in liquid flow path

3 188/266.6 (3 OR, 0 XR)

Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.5 ...Of the pulsating or reciprocating type
188/266.6Side mounted

3 222/401 (2 OR, 1 XR)

Class 222 : DISPENSING
222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
CONVEYER, MOVABLE TRAP CHAMBER, ETC.)
222/394 .Fluid pressure
222/401 ..Container-mounted fluid pressure generating
pump or pulsator

3 239/363 (0 OR, 3 XR)

Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL
239/337 .Fluid pressure discharge means
239/340 ..Pressure reducer at holder outlet
239/355 ...Holder carried or mounted gas pump
239/363Flexible wall gas pump

3 254/270 (3 OR, 0 XR)

Class 254 : IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
OR PULLING FORCE
254/264 APPARATUS FOR HAULING OR HOISTING LOAD,
INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CAB

LE

254/266 .Device includes rotatably driven, cable
contacting drum
254/270 ..Having cable contacted, supported, or
attached mechanism for generating control impulse to
retarding means or drive

3 254/360 (0 OR, 3 XR)

Class 254 : IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
OR PULLING FORCE
254/264 APPARATUS FOR HAULING OR HOISTING LOAD,
INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CAB

LE

- 254/266 .Device includes rotatably driven, cable contacting drum
- 254/360 ..Drive includes expansible, noncombustible, fluid motor (e.g., air, steam)
- 3 303/61 (0 OR, 3 XR)
 - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 - 303/50 MOTORMAN'S VALVES
 - 303/61 .Intermittent
- 3 303/9.62 (1 OR, 2 XR)
 - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 - 303/5 MULTIPLE FLUID-RECEIVING DEVICES
 - 303/6.01 .Multiple motors
 - 303/9.62 ..Apportioning control
- 3 376/260 (3 OR, 0 XR)
 - Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES, SYSTEMS, AND ELEMENTS
 - 376/260 HANDLING OF FISSION REACTOR COMPONENT STRUCTURE WITHIN REACTOR SYSTEM
- 3 417/555.2 (1 OR, 2 XR)
 - Class 417 : PUMPS
 - 417/437 EXPANSIBLE CHAMBER TYPE
 - 417/555.1 .Fluid serially moved to opposite side of pumping member
 - 417/555.2 ..Well swabs
- 2 60/487 (1 OR, 1 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/487 .Input pump and rotary output motor system having displacement varying type of direction or speed selector
- 2 60/545 (0 OR, 2 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/545 ..Having electricity or magnetically operated structure
- 2 60/548 (1 OR, 1 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/547.1 ..With control of or by a separate power fluid, etc.
 - 60/548 ...Flow in recirculating circuit controlled
- 2 60/551 (0 OR, 2 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/547.1 ..With control of or by a separate power fluid, etc.

09974739_CLSTITLES

60/551 ...Manual master and controller of motor driven
 master actuated by separate linkages to a common operatin
 lever

- 2 60/562 (1 OR, 1 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/562 ..Master piston of one pulsator circuit drives
 master piston of a parallel circuit through a resilient,
 fluid or lost motion connection
- 2 60/593 (0 OR, 2 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/593 ..Having fluid motor driving piston of master
 unit
- 2 74/606R (2 OR, 0 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/469 CONTROL LEVER AND LINKAGE SYSTEMS
 74/606R .Gear casings
- 2 74/625 (1 OR, 1 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/625 ALTERNATE MANUAL OR POWER OPERATORS
- 2 91/361 (1 OR, 1 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
 FLUID CONTROL
 91/361 .Electrical input and feedback signal means
 (459)
- 2 91/375A (1 OR, 1 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
 FLUID CONTROL
 91/368 .Follower type
 91/374 ..Plural movable valve parts
 91/375R ...Valve part moves about an axis
 91/375ATorsion bar
- 2 91/44 (0 OR, 2 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/41 WITH CORRELATED CONTROL OF MOTIVE FLUID AND
 LOCKING MEANS
 91/44 .Sequential operation of locking means and
 motive fluid control
- 2 92/187 (1 OR, 1 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/172 PISTON
 92/187 .With separable means for pivotally mounting
 connecting rod to piston
- 2 92/240 (0 OR, 2 XR)

09974739_CLSTITLES

- Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/172 PISTON
 92/240 .Side wall portion includes peripheral axially
 extending flexible lip
- 2 92/33 (0 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/31 RECTILINEARLY MOVING WORKING MEMBER AND COAXIAL
 OR PARALLEL ELEMENT SLIDABLY INTERENGAGED FOR RELATIVE
 ROTARY MOVEMENT
 92/33 .Element extends through working member portion
- 2 123/568.24 (1 OR, 1 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
 123/568.11 .Exhaust gas used with the combustible mixture
 (e.g., emission control Exhaust Gas Recirculation (EGR
) valve)
 123/568.21 ..Having electrically actuated control means
 123/568.23 ...Having rotary actuator control of EGR valve
 123/568.24Electrical rotary actuator rotates the EGR
 valve
- 2 137/625.43 (2 OR, 0 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/625 .Multi-way valve unit
 137/625.43 ..Four port reversing valves
- 2 137/627.5 (1 OR, 1 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/627.5 .Sequentially closing and opening alternately
 seating flow controllers
- 2 166/75.15 (0 OR, 2 XR)
 Class 166 : WELLS
 166/75.11 ABOVE GROUND APPARATUS
 166/75.15 .With means for injecting solid or particulate
 material into the well
- 2 180/429 (1 OR, 1 XR)
 Class 180 : MOTOR VEHICLES
 180/400 STEERING GEAR
 180/417 .With fluid power assist
 180/429 ..Having rotary working member
- 2 188/151R (2 OR, 0 XR)
 Class 188 : BRAKES
 188/381 FRICTIONAL VIBRATION DAMPER
 188/151R .Fluid pressure
- 2 188/290 (0 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER

09974739_CLSTITLES

- 188/290 .Using a rotary-type fluid damper
- 2 210/237 (0 OR, 2 XR)
 Class 210 : LIQUID PURIFICATION OR SEPARATION
 210/232 WITH REPAIR OR ASSEMBLING MEANS
 210/237 .Hoist or handle means
- 2 222/209 (0 OR, 2 XR)
 Class 222 : DISPENSING
 222/206 RESILIENT WALL
 222/209 .Fluid pressure generating pump or pulsator
 and/or removable flexible wall closures
- 2 222/325 (0 OR, 2 XR)
 Class 222 : DISPENSING
 222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
 CONVEYER, MOVABLE TRAP CHAMBER, ETC.)
 222/325 .Insertable cartridge or removable container
- 2 222/385 (1 OR, 1 XR)
 Class 222 : DISPENSING
 222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
 CONVEYER, MOVABLE TRAP CHAMBER, ETC.)
 222/372 .With material supply container and discharge
 assistant with casing (e.g., supply container and pump)
- 222/383.1 ..Container-mounted pump
 222/385 ...Pump or pulsator casing within supply
 container
- 2 239/360 (0 OR, 2 XR)
 Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
 239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL
 239/337 .Fluid pressure discharge means
 239/340 ..Pressure reducer at holder outlet
 239/355 ...Holder carried or mounted gas pump
 239/360Pump casing within supply holder
- 2 239/373 (0 OR, 2 XR)
 Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
 239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL
 239/337 .Fluid pressure discharge means
 239/373 ..Means to pressurize contents of holder
- 2 251/129.08 (0 OR, 2 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/129.01 ELECTRICALLY ACTUATED VALVE
 251/129.08 .Having means to produce proportional flow
- 2 251/287 (0 OR, 2 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/284 LIMIT STOP
 251/286 .Rotary valve
 251/287 ..Stop element on head
- 2 251/30.01 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/12 FLUID ACTUATED OR RETARDED
 251/25 .Pilot or servo type motor

09974739_CLSTITLES

- 251/30.01 ..Electrically actuated pilot valve
- 2 251/65 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/65 PERMANENT OR CONSTANTLY ENERGIZED MAGNET ACTUATOR
- 2 251/96 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/89 WITH MEANS FOR BLOCKING OR DISABLING ACTUATOR
- 251/95 ..Released by non-valving actuator motion
 251/96 ..Linear reciprocation of rotary handle
- 2 303/10 (0 OR, 2 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/10 WITH PUMP
- 2 303/119.2 (1 OR, 1 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/121 SPEED-CONTROLLED
 303/113.1 ..Having a valve system responsive to a wheel lock signal
 303/119.1 ..System controlled by solenoid valve
 303/119.2 ...System solenoid valve detail
- 2 303/2 (0 OR, 2 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/2 MULTIPLE SYSTEMS
- 2 303/9.75 (2 OR, 0 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/5 MULTIPLE FLUID-RECEIVING DEVICES
 303/6.01 ..Multiple motors
 303/9.62 ..Apportioning control
 303/9.75 ...Detail
- 2 376/313 (0 OR, 2 XR)
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES, SYSTEMS, AND ELEMENTS
 376/308 FISSION REACTOR MATERIAL (INCLUDING REACTION PRODUCTS) TREATMENT
 376/310 ..Impurity removal
 376/313 ..By filters, ion exchangers, or absorbers
- 2 475/82 (0 OR, 2 XR)
 Class 475 : PLANETARY GEAR TRANSMISSION SYSTEMS OR COMPONENTS
 475/31 FLUID DRIVE OR CONTROL OF PLANETARY GEARING
 475/72 ..Fluid pump and motor in one of plural paths to or from planetary gearing
 475/80 ..Plural speed ranges
 475/81 ...With constant speed ratio between input and one fluid unit
 475/82Having single planet carrier

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EAST 4/26/04

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